US ERA ARCHIVE DOCUMENT

	1	Lakes,		I			I	1	I	1	Ι
		Reservoirs,	Great					Multi-class		Total	
Jurisdiction	Rivers			Estuaries	Bayous	Coastal	Wetland	Waters	Statewide	Advisories	Comment
			Lakes	Estuaries	Dayous	Coasiai	welland	Waters	Statewide		
Alabama	9	3				1				13	
Alaska										0	
American Samoa	_			1						1	
Arizona	3	2								5	
Arkansas	8	_			3			1		21	
California	4	9		2		11		1		27	
Colorado	L .	11								11	
Connecticut	4	6		1					1	12	
Delaware	6	2		6						14	
District of Columbia		50						40	1	1	
Florida	28					8		10		98	
Georgia	61	31		3			1			96	
Hawaii	2			1						3	
Idaho		1								1	
Illinois	14		1							27	
Indiana	117	50	1						1	169	
lowa	1	1								2	
Kansas	10									11	
Kentucky	4							1		6	
Louisiana	6			1	5	1		1		23	
Maine	10					1			2	13	
Maryland		1		2						3	
Massachusetts	17			4		1		1	1	79	
Massachusetts - Federal		2								2	
Michigan	58		14				1		1	120	
Michigan - Tribal		13								13	
Minnesota	85		1							825	
Mississippi	8	4				1				13	
											Missouri has one regional
											advisory included in the total
Missouri	4							2		6	for Multi-class.
Montana	3	20								23	
Nebraska	19	15								34	
Nevada	1	1								2	
New Hampshire	2	1				1			1	5	
New Jersey	14	24		6		2		1	1	48	
New Mexico	3	23								26	
New York	23	41	8	3		3			1	79	
											North Carolina has one
											regional advisory included in
North Carolina	6			1				1	1	17	the total for Multi-class.
North Dakota	2									20	
Ohio	45	4	2						1	52	
Oklahoma	1	1								2	
Oregon	6									12	
Pennsylvania	22	2	2	1						27	
Puerto Rico										0	
Rhode Island	1					1				2	
South Carolina	15	10						1		26	
South Dakota										0	
Tennessee	7	9						1		17	

Appendix E-1. Number of Fish Consumption Advisories

Jurisdiction	Rivers	,	Great Lakes	Estuaries	Bayous	Coastal		Multi-class Waters		Total Advisories	Comment
Texas	4	13		2		1				20	
Utah	1	1								2	
Vermont	1	3							1	5	
Virginia	7									7	
Virgin Islands										0	
Washington	1	1		6		2				10	
West Virginia	8									8	
Wisconsin	95	249	3							347	
Wisconsin - Tribal		100								100	
Wyoming										0	
Total	746	1,610	32	40	8	34	2	21	13	2,506	
Percent	30%	64%	1%	2%	0%	1%	0%	1%	1%		
Data from the National Listing of Fish and Wildlife Advisories.											
Advisories issued by the					ents were c	ombined in	n this report.				
dvisories on canal waters are included in the total for rivers.											

Appendix E-2. Number of Fish Advisories Caused by Individual Pollutants

		PCBs			Other	DDT, DDE,		
Jurisdiction	Mercury		Chlordane	Dioxins	Pesticides	DDD	Selenium	Comment
Alabama	4	5	3			2		
Alaska								
American Samoa	1	1				1		
Arizona	2		3		3	3		
Arkansas	19	1		1				
California	11	13	1		1	13	3	
Colorado	8		3		3		1	
								Connecticut has a statewide advisory
Connecticut	5	6	1					for mercury.
Delaware	1	13		1	1			
Bolamaro								The District of Columbia has a
District of Columbia		1						statewide advisory for PCBs.
Florida	97			1				statewide advisory for 1 Obs.
Georgia	80	25	1	'	1	1		
Hawaii	- 00	1	<u>'</u>		1	 '		
Idaho	1	I			 '	1	1	
Illinois	2	18	9					
IIIIIIOIS		10	9					Indiana has statewide advisories for
Indiana	126	125						mercury and PCBs.
lowa		2	1					
Kansas			11					
Kentucky	1	5	1					
Louisiana	17	4		2				
								Maine has statewide advisories for
Maine	1	10		8				cadmium and mercury.
Maryland			3					,
·								Massachusetts has a statewide
Massachusetts	56	20	4	1		3		advisory for mercury.
Massachusetts - Federal	2							
								Michigan has a statewide advisory for
Michigan	40	104	14	7	•	1		mercury.
Michigan - Tribal	13							j
Minnesota	821	83						
Mississippi	8	5		1				
Missouri		4	4	-				
Montana	22	4	-					
Nebraska	12	22			12			
Nevada	2							
1404444								New Hampshire has a statewide
New Hampshire	2	2	ĺ	1				advisory for mercury.
new Hampshire				'				New Jersey has a statewide advisory
New Jersey	30	12	6	9				for mercury.
New Mexico	26	12	-					ioi mercury.
INGW INIGNICO	20							New York has statewide advisories
New York	17	47	14	8	8	4		for chlordane, DDT, mirex, and PCBs.
INEW IUIK	17	47	14	· °	8	4		North Caroliona has a statewide
North Carolina	10		ĺ	5			_	
North Carolina	10 20			- °				advisory for mercury.
North Dakota	20							

Appendix E-2. Number of Fish Advisories Caused by Individual Pollutants

		PCBs			Other	DDT, DDE,		
Jurisdiction	Mercury	(Total)	Chlordane	Dioxins	Pesticides	DDD	Selenium	Comment
								Ohio has a statewide advisory for
Ohio	21	37	3		1			mercury.
Oklahoma	1				1	1		
Oregon	9	2		1		1		
Pennsylvania	1	22	7		2			
Puerto Rico								
Rhode Island	1	2		1				
South Carolina	24	3						
South Dakota								
Tennessee	2	11	6	1				
Texas	7	5	7	1	4	. 4	3	
Utah							2	
								Vermont has a statewide advisory for
Vermont	3	2						mercury.
Virginia	3	3			1			
Virgin Islands								
Washington	1	2		2	1	1		
West Virginia		3	1	6				
Wisconsin	302	54	1	2				
Wisconsin - Tribal	100							
Wyoming								
Total	1,931	679	104	59				
Percent*	77%	27%	4%	2%	2%	1%	0%	
Data from the National Lis	sting of Fish a	nd Wildli	fe Advisorie	S.				
	Ĭ							
* Percentage of 2,506 tota	al fish advisor	ies in eff	ect.	1				

Appendix E-3. Shellfish Harvesting Restrictions due to Pathogens Reported by States, Territories, and Commissions

	Number of Waterbodies		Conditionally			Management	Total Area	
Jurisdiction	with Restrictions	Approved (sq. miles)	Approved ^a (sq. miles)	Restricted ^b (sq. miles)	Prohibited ^c (sq. miles)	Closures ^d (sq. miles)	Affected ^e	Comment
Alabama	Restrictions	(34. 111103)	(34. 111163)	(34. 111163)	(3q. IIIIc3)	(34. 111163)	(3q. IIIIc3)	Comment
Alaska								
California								
Connecticut								
Delaware								
Delaware River				97.00			97.00	
District of Columbia				07.00			07.00	The District of Columbia prohibits commercial harvest of shellfish in all its waters.
Florida								
Georgia		49.71			395.00		395.00	
Guam	0	0.00	0.00	0.00	0.00	0.00	0.00	Officially, there are no designated shellfish collection areas for Guam.
Hawaii	0						0.00	
Interstate Sanitation Commission								
Louisiana	26							
Maine								
Maryland Massachusetts Mississippi N Mariana Islands	37 12	1,665.90 2,185.89	68.08 41.54	103.11	0.00 240.48		171.19 541.74	Maryland does not routinely monitor for human pathogens; fecal coliform bacteria are used as an indicator for pathogenic organisms. The State also requires a sanitary survey to check for pollution sources that show a potential for human health risks.
New Hampshire	11	11.40	0.50	1.50	14.30	0.50	16.80	The 54 sq mi of open ocean water w/in NH are also closed for shellfishing. This is not due to elevated bacteria concentrations; rather, it is because a sanitary survey of the area has not been recently conducted in accordance with NSSP guidelines.
								These values include both
New Jersey		798.00	113.00		141.00		254.00	estuary/bay and ocean waters.
New York		1,562.50	113.00		312.50		312.50	
North Carolina		1,502.50			312.00		312.00	
Oregon	7	3.59	58.01				58.01	
Puerto Rico	 '	5.59	30.01				30.01	
Rhode Island	39	146.08	24.06	1.94	40.45		66.45	
South Carolina	122		6.40	147.54	36.19	76.32		Waters that South Carolina listed both as prohibited due to poor water quality and management closures were reported as prohibited.

Appendix E-3. Shellfish Harvesting Restrictions due to Pathogens Reported by States, Territories, and Commissions

	Number of Waterbodies		Conditionally			Management			
	with	Approved	Approved ^a	Restricted ^b	Prohibited ^c		Affected ^e		
Jurisdiction	Restrictions	(sq. miles)	(sq. miles)	(sq. miles)	(sq. miles)	(sq. miles)	(sq. miles)	Comment	
Texas									
Virgin Islands									
Virginia			6.00		140.00		146.00		
Washington									
Total	254	7,044.18	317.59	351.09	1,319.92	336.54	2,325.14		
^a Conditionally approved waters do						 when criteria are	met.		
Restricted water may be harvested if the shellfish are purified with clean water following harvest.									
^c Shellfish may not be harvested in prohibited waters.									
d Preventative closures due to a la	Preventative closures due to a lack of data or proximity to point sources or marinas.								
e Includes waters that are classifie									

Appendix E-4. Sources Associated with Shellfish Harvesting Restrictions due to Pathogens

	Urban Runoff	Storm Sewers	Municipal D	ischarges	NPS (Gei	neral)	Point Source	s (General)	Industrial Discharges	
Jurisdiction	Number of Restrictions	Sq. Miles	Restriction s	Sa. Miles	Number of Restrictions	Sq. Miles	Number of Restrictions	Sa. Miles	Number of Restrictions	Sq. Miles
Alabama		•		•						
Alaska										
California										
Connecticut										
Delaware									-	
Delaware										
Delaware River						97		97		
District of Columbia										
Florida										
Georgia	3	127	7	127	10	356	9	162		
Guam	Ĭ	.21	†		1	- 550	l	1.52		
Hawaii	0	0	0	0	0	0	0	0	0	0
Interstate Sanitation Commission										
Louisiana										
Maine										
Maryland			1	1.48	33	80.27			4	9.58
Massachusetts										
Mississippi										
N Mariana Islands										
New Hampshire					11	16.8				
New Jersey New York		47		3						
North Carolina							<u> </u>			
Oregon	2	25.79	6	54.42	6	54.42			5	43.48
Puerto Rico		20.19	0	57.42	· ·	J7.42			1	70.70
Rhode Island			16		25				16	
South Carolina			10		70		43	36.19		
Journ Carollina					70	100.00	43	30.19	I	

Appendix E-4. Sources Associated with Shellfish Harvesting Restrictions due to Pathogens

	CSOs	Os Septic Tanks Marinas		nas	Comment		
Jurisdiction	Number of Restrictions	Sq. Miles	Number of Restrictions	Sa. Miles	Number of Restrictions	Sa. Miles	
Alabama							
Alaska							
California							
Connecticut							
Delaware							
Delaware							0
Delaware River							Sources identified using best professional judgement.
							The District of Columbia prohibits commercial harvest of shellfish in
District of Columbia							all its waters.
Florida							an no watere.
liona							An additional 3 restrictions affecting
							66 square miles are due to
Georgia	ĺ				3	66	industrial nonpoint sources.
Guam							
Hawaii	0	0	0	0			
Interstate Sanitation Commission							
Louisiana							
Maine							
Maryland Massachusetts			2	6.44			for human pathogens; fecal coliform bacteria are used as an indicator for pathogenic organisms. The State also requires a sanitary survey to check for pollution sources that show a potential for human health risks.
Mississippi							
N Mariana Islands							
New Hampshire							The 16.8 square miles include 0.5 square miles that are classified "conditionally approved" which are open during dry weather but closed after certain rain events.
							Values are for bay waters. New Jersey reports sources of restrictions in percentages - 30% are due to urban runoff, 2% to municipal discharges, 3% to CSOs,
New Jersey	ĺ	5				39	and 25% to marinas.
New York							
North Carolina							
Oregon			7	58.01			
Puerto Rico			<u>'</u>	55.51			
Rhode Island	5		14		18		
South Carolina			17		10		
Oodii I Odi Olii la	I	1		1			

Appendix E-4. Sources Associated with Shellfish Harvesting Restrictions due to Pathogens

	Urban Runoff	Urban Runoff/Storm Sewers		Municipal Discharges		NPS (General)		s (General)	Industrial Discharges	
Jurisdiction	Number of Restrictions	Sq. Miles	Restriction s		Number of Restrictions		Number of Restrictions			Sq. Miles
Texas		•		•				•		
Virgin Islands										
Virginia										
Washington										
Total	5	199.79	30	185.9	155	758.34	52	295.19	25	53.06

Appendix E-4. Sources Associated with Shellfish Harvesting Restrictions due to Pathogens

	CSOs		Septic 7	Tanks	Marin	as	Comment
	Number of		Number of		Number of		
Jurisdiction	Restrictions	Miles	Restrictions	Sq. Miles	Restrictions	Sq. Miles	
Texas							
Virgin Islands							
Virginia							
Washington							
Total	5	5	23	64.45	21	105	

Appendix E-6. Contact Recreation Restrictions Reported by States, Tribes, Territories, and Commissions

	Contact	Number		
	Recreation	of Sites		
Jurisdiction	Restrictions	Affected	Reasons for Restriction	Comment
Agua Caliente Band				
			Fecal coliforms from sanitary sewer	
			overflow; each restricition a one-time	
Alabama	12	7	event.	
Alaska	12	<u>'</u>	event.	
riadita			Fecal coliform in Lake Havasu and	
			Slide Rock State Park. Possible	
		_	sources include wastewater disposal,	
Arizona		2	natural sources, and recreation.	
Arkansas				
Augustine Band			Dain construction courses storms	
			Rain, construction, sewage, storm	
			runoff, urban runoff, pump failure,	
			inadequately treated sewage, line	
			blockage, and syringes found on	
California	187		beach.	
Colorado				
Connecticut				
Cortina Rancheria				
			Unidentified foaming agent: MBAS	
			tests detected extremely high	
			concentrations one week in July.	
			Possible dumping or septic system	Swimming and fishing not
Coyote Valley Reservation	4	4	failtures upstream.	recommended.
Delaware	·			
Delaware River	0	0		
District of Columbia				
Florida				
Georgia	1	1	Fecal coliform	
			Tanguisson Beach has been closed to	
			the public since 1991 due to toxics	
0		_		
Guam	1	1	found in seaweed.	
				There were no beach closures, but
				ten incidents required posting of
Hawaii	0	_		beaches.
Idaho	5	5		
Illinois				
Indiana				

Appendix E-6. Contact Recreation Restrictions Reported by States, Tribes, Territories, and Commissions

	Contact	Number		
	Recreation	of Sites		
Jurisdiction	Restrictions	Affected	Reasons for Restriction	Comment
			Elevated levels of bacteria, sewage	
			spills, sewage treatment facility	
			malfunctions, untreated sewage	
			discharges, and floating mat of	
Interstate Sanitation Commission		80	vegetation.	
			High levels of indicator bacteria (fecal coliform) at swimming beach, August	Follow-up monitoring showed (1) source of bacteria was population of Canada geese and (2) bacteria
lowa	1	1	1997.	levels < EPA criteria.
Kansas	_			
Kentucky	3		Fecal coliform contamination.	
La Jolla Band of Indians	0	0		
			Fecal coliform and sediment	
Louisiana	8		contamination	
Maine		_		
Manzanita Band	0	0		
Maryland	38	29	Bacteria from runoff, septic discharges, sewer overflow, recreational activities, wildlife, and other sources.	Bathing advisories from local health departments are not identified as restrictions or closures.
				Massachusetts does not compile monitoring data on beach data on a
Massachusetts				statewide basis.
Michigan				
Minnesota				
Mississippi				
Missouri				
Montana				
N Mariana Islands				
Nebraska	0	0		
Nevada				
			4 beaches in '96 and 2 in '97 were	
			posted (but not closed) due to bacteria	
			exceedances from Canadian geese (1	
New Hampshire	6	4	beach) and high swim loads (other 3).	
New Jersey			, , , , , , , , , , , , , , , , , , , ,	
New Mexico				
New York				
North Carolina				
North Dakota	0	0		
Ohio				

Appendix E-6. Contact Recreation Restrictions Reported by States, Tribes, Territories, and Commissions

	Contact	Number		
	Recreation	of Sites		
Jurisdiction	Restrictions	Affected	Reasons for Restriction	Comment
Ohio River Valley				
Oklahoma	0			
Oregon	0	0		
Pennsylvania				
Puerto Rico				
Rhode Island	2	2	Town of Barrington closed town beach due to high fecal coliform; Town of Warwick has closed Little Pond for the last three years.	
South Carolina	27	17	Exceeded acceptable fecal coliform levels.	
South Dakota	29	38	Fecal coliform	
Tennessee	24	36	Bacteriological contamination from wastewater, stormwater, and septic tanks.	
Texas			tainto.	
Torres-Martinez Desert Band Twenty-Nine Palms Band Utah				
Vermont	7	3	Heavy rains resulting in urban runoff containing pollutants, faulty septic systems, and other sources of bacteria.	
Virgin Islands				
Virginia				
Washington				
West Virginia				
Wisconsin				
Wyoming	0	0		
Yavapai-Prescott Reservation				
Total	355	240		
Total	355	240		

Appendix E-10. Sediment Contamination Reported by States, Tribes, Territories, and Commissions

	Number of Sites	Number of Sites	Number of Sites		
Jurisdiction	Assessed	with Toxics	of Concern	Contaminants Detected	Contaminants of Concern
Agua Caliente Band					
Alabama					
Alaska					
Arizona					
Arkansas					
Augustine Band					
California					
Colorado					
Connecticut					
Cortina Rancheria	1				
Cortina Nancheria					
Coyote Valley Reservation	1	1	1		Non-specified household toxics
Delaware					·
Delaware River					
District of Columbia	2	2		Trace metals, PAHs, and PCBs.	
Florida					
Georgia					
Guam					
Hawaii	1	13		Pesticides, metals (lead, arsenic)	
Idaho				· consider, metale (read, discome)	
Illinois					
Indiana					
Interstate Sanitation Commission	n				
merciale carmation commission	<u> </u>				
				Taria matala annon soblemia s	Name (lavor dans met bevor as discont
				Toxic metals, organochlorine	None (lowa does not have sediment
lowa	19	16	0	compounds	criteria)
Kansas					
Kentucky	1	1		PCBs	
La Jolla Band of Indians					
Louisiana		3			
Maine					
Manzanita Band					
Maryland					
				Metals (As, Pb, Hg), priority organics	
				(PCBs, PAHs, dioxin), oil and grease,	
Massachusetts		24		pesticides.	
Michigan					
Minnesota					

Appendix E-10. Sediment Contamination Reported by States, Tribes, Territories, and Commissions

Jurisdiction	Sources of Contaminants	Comment
Agua Caliente Band		
Alabama		
Alaska		
Arizona		
Arkansas		
Augustine Band		
California		
Colorado		
Connecticut		
Cortina Rancheria		
		Recycling and demonstration transfer
Coyote Valley Reservation	Dumpster above Russian River	station planned and imminent.
Delaware		F 10 10 10 10 10 10 10 10 10 10 10 10 10
Delaware River		
District of Columbia		
Florida		
Georgia		
- Coorgia		
		Guam does not currently have provisions for the collection and analyzation of sediments - an outside study should be available for review in
Guam		1998.
Hawaii		
Idaho		
Illinois		
Indiana		
Interstate Sanitation Commissio	n	
minorate Garmanon Gorminosio		Data from USGS NAWQA study and from US Army Corps of Engineers
lowa	Natural, agriculture, unknown	monitoring
Kansas		, i
Kentucky		
La Jolla Band of Indians		
Louisiana		
Maine		
Manzanita Band		
Maryland		
Massachusetts		
Michigan		
Minnesota		
IVIII II ICSUla	<u>I</u>	

Appendix E-10. Sediment Contamination Reported by States, Tribes, Territories, and Commissions

	Number of Sites	Number of Sites	Number of Sites		
Jurisdiction	Assessed	with Toxics	of Concern	Contaminants Detected	Contaminants of Concern
				Priority organics, nonpriority organics,	
Mississippi		16		metals, unknown toxicity	
Missouri		10		metals, unknown toxicity	
Montana					
N Mariana Islands					
Nebraska					
Nevada					
Ivevaua					
Now Hompshire					
New Hampshire					
New Jersey New Mexico					
New Mexico					
New York					PCBs and other priority organics
North Carolina					
North Dakota		1		Pesticides	
Ohio					
Ohio River Valley					
Oklahoma					
- Chianoma				Arsenic, creosote, and	
Oregon		1		pentachlorophenol.	
Pennsylvania				p 0.11.00.1101.1011	
Puerto Rico					
T delte i ties					V00 - II
					VOCs, chlorinated solvents,
					hydrocarbons, metals, pesticides,
Rhode Island			25		PCBs, and other hazardous materials
South Carolina					
South Dakota					
				Priority organics, lead, mercury, PCBs,	Priority organics, lead, mercury, PCBs,
Tennessee		37	37	dioxin	dioxin
Texas		07	0,		
Torres-Martinez Desert Band					
Twenty-Nine Palms Band					
Utah					
Vermont					
Virgin Islands					
Virginia					
Washington					
West Virginia			1		
vvest viigiilia					<u> </u>

Appendix E-10. Sediment Contamination Reported by States, Tribes, Territories, and Commissions

Jurisdiction	Sources of Contaminants	Comment
	Industrial and municipal point sources,	
	urban runoff/storm sewers, marinas, land	
Mississippi	disposal, hazardous waste	
Missouri		
Montana		
N Mariana Islands		
Nebraska		
Nevada		
		New Hampshire does not currently have numeric water quality criteria for
New Hampshire		sediments.
New Jersey		
New Mexico		
Nava Varla		Refers to impairment in Hudson River
New York		and Lake Ontario.
North Carolina		
	Suspect abandoned landfill and pesticide	
North Dakota	formulating plant	
Ohio	romanamy pram	
Ohio River Valley		
Oklahoma		
Oregon	Superfund site	
Pennsylvania		
Puerto Rico		
Rhode Island		These are site remediation projects.
South Carolina		These are site remediation projects.
South Dakota		
Codin Bakota		
	Past industrial discharges, Superfund	Tally compiled from state's 1998 303(d)
Tennessee	sites, mining activities	list.
Texas		
Torres-Martinez Desert Band		
Twenty-Nine Palms Band		
Utah		
Vermont		
Virgin Islands		
Virginia		
Washington		
West Virginia		

Appendix E-10. Sediment Contamination Reported by States, Tribes, Territories, and Commissions

	Number of Sites	Number of Sites	Number of Sites		
Jurisdiction	Assessed	with Toxics	of Concern	Contaminants Detected	Contaminants of Concern
Wisconsin					
Wyoming					
Yavapai-Prescott Reservation					
Total	23	115	63		

Appendix E-10. Sediment Contamination Reported by States, Tribes, Territories, and Commissions

Jurisdiction	Sources of Contaminants	Comment
Wisconsin		
Wyoming		
Yavapai-Prescott Reservation		
Total		